

**SUMMARY OF THE INVENTION**

It is the object of the present invention to provide a mathematical problem solving game that is fun to play. It is a further object of the present invention to provide such a game, providing a plurality of skill levels wherein means for competing with both low and high skill levels. In accordance with the present invention a mathematical problem solving game is provided of the type comprising of a specialized Game Control box that has the function of establishing and displaying four random calculation numbers from a selection of numbered discs stored in the game control box, by means of a player shaking the said game control box, to cause the selection and display of four random calculation numbers. The function of displaying a single random solution number, is achieved by the control box, having a surface with a dial pointer that is physically spun by a player, and comes to rest at at a sectioned position on a dial face. The inner numbers of the sections are selected as the low skill level solution numbers, the outer numbers the higher skill levels. Thus the ability for players to select questions within their skill limits has been provided.

It is a further accordance of the present invention to provide an enjoyable and comprehensive mathematical game. The said mathematical game is started by a player shaking the aforementioned game control box to cause the display of four calculation numbers and also spinning the dial to display a single solution number and then placing the said game control box face up in a location that simultaneously displays the aforementioned mathematical questions to all game players, each of whom can earn points by being the first player to solve the question using a pre-established fixed format.

Each mathematical question must be solved within a fixed format of four calculation numbers displayed and one solution number displayed by a pointer, whereby the four calculation numbers must be divided into two questions incorporating each of the four calculated numbers just once.

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having answers, that can be combined to form a third question comprising an answer, that equals the solution number of the mathematical question displayed by the game control box.

Addition, subtraction, division and multiplication may be required to generate said correct solution.

Enjoyment and competition is increased by a percentage of questions not having a possible solution, a declaration of "No solution possible" can be made by a player with the result that remaining players will be time limited to find a correct solution.

Players will be awarded points for the following:

Being the first player to declare "Solved it." and provide a correct solution, also for being the first player to correctly declare "No solution possible" and for correctly calling "Solved It" after a "No solution possible" has been declared.

A timing device is used to limit the time available to provide a solution. Thus the requirement for a competitive and enjoyable game has been met.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 Is a front perspective view of an enclosed game control box structure with a timer shown stored, dial face and stored discs not shown for clarity.

Fig. 1a Is an end view illustrating the control box window-display compartment.

Fig. 1b Isolates a single control box numbered disc

Fig. 2 Depicts a control box face displaying a mathematical problem that has no solution.

Fig. 3 Illustrates the Timer raised and ready to be inverted.

Fig. 3a illustrates the timer in a storage position.

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## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A mathematical problem solving game having mandatory rules related to how the problems must be solved wherein players are provided with four random calculation numbers used a random final solution number by means of a game control box, the function of which is integrated into the following illustrated drawings.

Fig. 1 Fig. 1a Fig. 1b combine to illustrate an enclosed game control box (1) storing a plurality of numbered discs, (2) to initiate each mathematical problem solving game, a player shakes the game control box (1) to cause four numbered discs (2) to enter the game control box (1) display window (3) by passing by an access flange (4) located at the base of a numbered disc (2) distance compartment (5) thus four numbered discs (2) are randomly selected and displayed in the game control box (1) display window (3).

The objective of a challenging and fun game for a variety of skill levels is achieved by Fig. 2 the location of multiple solution numbers (6) located on a dial face positioned in a high skill level outer ring (7) as indicated by a pointer (8) of a dial face (7) and located on the surface of a game control box, (1) The level of skill required to solve the posed unique mathematical operation using calculation numbers 7, 3, 5, 9, outer ring (7) solution number 25 is high and as illustrated by figure 2 a solution is not possible, selecting the alternate low skill inner ring (8) solution number (6) 8 results in the unique mathematical problem having a simple solution of  $9+8=7+5+2=8$  Correct solution number.

Fig. 3 illustrates a game control box (1) timing device (11) with a storage spring (12) that is used to position the timer (11) for easy access. Sliding clips (13) are moved along the upper surface of the game control box to indicate scores.

Fig. 3a illustrates a timing device, (11) against a storage spring (12) for the purpose of fitting the timing device (11) into an easy access position for use.

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A further example of increased levels of difficulty is a displayed problem of calculation numbers 6, 5, 12, 3 = 10 form the first two questions from the calculation numbers 6, 5 = 1, 12, 3 = 9 leaving answers that form a question  $1+9=10$ . Using the same calculation numbers and changing the solution number to 6 increases the level of difficulty 6, 5, 12, 3 = 6 and the final format solution is  $5 \times 5 = 30$ ,  $12 \div 3 = 36$ ,  $36 - 30 = 6$  thus the level of difficulty was significantly increased fig. 2a provides a further example.

Thus it is apparent that there has been provided in accordance with the invention a unique mathematical problem solving game having the characteristics of a random number generating device combined with a multi skill level fun to play game that is both challenging and fun with the unique characteristic of forcing players to relate answers to a future required result.

The embodiments of the invention in which an exclusive property or privilege is claimed are:

1. A mathematical problem solving game, comprising a game control box randomly displaying four numbered discs and a pointer to randomly select and display a solution number for the purpose of formulating a fixed format mathematical problem requiring the forming of three fixed format questions.

2. A Mathematical Problem Solving Game of claim 1 wherein playing of a mathematical game is subject to the following rules:

a rule that permits players to pre-select skill levels, as indicated by a dial pointer located on a game control box.

a rule that requires that a player initiates the start of the mathematical problem solving game of claim 1 by shaking the game control box of claim 1 to select and display random numbers required for a mathematical question solution.